



Integrated Resource Management, Inc.
A Privately Owned Public Utility

P.O. Box 642
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March 24, 2020

Chairman Robin L. Morrison
c/o Ectory Lawless
Tennessee Public Utility Commission
502 Deaderick Street, 4th Floor
Nashville, TN 37243-0001

Sent Via Electronic Mail (.pdf scan): TPUC.DocketRoom@tn.gov
Entitled: IRM Utility, Inc. – COVID-19 – Response Plan March 2020.pdf

Re: 2020 Coronavirus Pandemic
TPUC, Request as of March 19, 2020
IRM Utility, Inc., Emergency Operational & Response Plan

Chairman Morrison:

IRM Utility, Inc. ("IRM") has received a request of correspondence from the Commission, dated March 19, 2020. In response to the Commission's request, the following Operations and Maintenance Schedule has been adopted and added to IRM's existing program to fulfill the request of the Honorable Governor Lee. Please file the attached Plan.

It is IRM's awareness of the need for modifications of operations to be aware of the conditions of the world-wide COVID-19 crisis and that the need for rapid response is necessary. Therefore, IRM is requesting an emergency assistance from The State of Tennessee in lieu of an across the board "Emergency Rate Increase" of our fees to fulfill this Program. This will partially fund the "Weekly Updates", PPE equipment needed to fulfill a proper management program, and funding required if revenues are compromised. Any funding supplied will be placed in a special and separate Emergency Fund account for this use only.

As members of the National On-site Wastewater Association and board members of the Tennessee On-site Wastewater Association, IRM is aware that Tennessee receives 1.4 to 1.6 Billion US dollars for wastewater management. There most likely will be more emergency funds to follow with the emergency bills being passed at the present time.

Please consider facilitating efforts to appropriate the funding to IRM's operations to ensure the continuity of safe, reliable service vital to the public health, safety, and welfare. If you have any questions about this request or need further information, please feel free to call.

Sincerely,

Jeffrey W. Cox, Sr., LPSS, President of IRM
Certified B/NS and Collection System Operator
Microbiologist





Operation and Maintenance Inspection Schedule

**ONGOING REQUEST FOR INFORMATION RELATED TO MEASUREMENTS TAKEN
DURING CORONAVIRUS "COVID-19" PUBLIC HEALTH EMERGENCY**

Prepared for: The Tennessee Public Utility Commission

March 21, 2020

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Operation and Maintenance Inspection Schedule

**Pursuant to The Tennessee Public Utility Commission
REQUEST FOR INFORMATION RELATED TO MEASUREMENTS TAKEN
DURING CORONAVIRUS "COVID-19" PUBLIC HEALTH EMERGENCY**

March 21, 2020

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Section 1.0

General

1.1 Purpose:

This report is as requested by the Tennessee Public Utility Commission ("TPUC"), dated March 19, 2020, from Chairman Robin L. Morrison. It is prepared as an addition to the practices that are the Operation and Maintenance Inspection Schedule ("O&M") employed by Integrated Resource Management, Inc. d/b/a/ IRM Utility, Inc. ("IRM"). This document does not replace the document prepared for the Tennessee Department of Environment and Conservation, Division of Water Resources ("The Division") for support in the State Operating Permits ("SOP") dated September 1, 2012. This document addresses issues of current environmental impact.

At IRM, the safety and well-being of our employees and our customers is always a high priority, and we recognize the important role we play in providing our customers with supplies and services during this critical time.

1.2 Aligning with public health authorities:

We are closely monitoring updates from the Centers for Disease Control and the World Health Organization regarding COVID-19. We will continue to seek guidance from these agencies, public health officials and government agencies on an ongoing basis.

1.3 Protection of our employees and customers:

As our employees interact with customers and the general public, we have taken steps to limit exposure to the virus. We have put restrictions on travel, postponed large-scale events, limited the size of meetings, provided remote-work solutions, and continue to reinforce safe behavior in every work environment. Additionally, we have protocols in place for increased cleaning, disinfecting, and appropriate quarantine procedures based on recommendations by government and health agencies.

The recommendations of distance from clients, sizes of events, travel, etc., have been changing on a daily basis. As per Section 1.2, these considerations will be employed.

Section 2

Proper Operation, Maintenance and Safety Precautions

2.1 Education of COVID-19:

IRM has discussed and will continue the updates of safety required of our Technicians servicing the wastewater systems. Our Certified Operators have been through the training programs required for their Certifications. These programs and continuing education have included trainings with many health issues including sanitation and aseptic techniques. This Viral organism is one that we all need to stay current with as suggested in Section 1.2. As an individual with a BS Degree in Microbiology, any further information from TDEC, TPUC, of other agencies will greatly be appreciated and adhered to.

2.2 Typical Operation Sanitation Techniques:

The typical decontamination and aseptic techniques are employed as instructed at The Flemming Training Center for day-to-day wastewater operations.

2.3 CDC Recommendations for Wastewater Operators:

According to the CDC website:

"CDC is reviewing all data on COVID-19 transmission as information becomes available. At this time, the risk of transmission of the virus that causes COVID-19 through sewerage systems is thought to be low. Although transmission of COVID-19 through sewage may be possible, there is no evidence to date that this has occurred. This guidance will be updated as necessary as new evidence is assessed."

"Wastewater and sewage workers should use standard practices, practice basic hygiene precautions, and wear personal protective equipment ("PPE") as prescribed for current work tasks."

"Wastewater treatment plant operations should ensure workers follow routine practices to prevent exposure to wastewater. These include using engineering and administrative controls, safe work practices, and PPE normally required for work tasks when handling untreated wastewater. No additional COVID-19-specific protections are recommended for employees involved in wastewater management operations, including those at wastewater treatment facilities."

2.4 Conflicting Information:

However, the CDC website also states:

"SARS, a similar coronavirus, has been detected in untreated sewage for up to 2 to 14 days. In the 2003 SARS outbreak, there was documented transmission associated with *sewage aerosols*."

Further, a recent study published in the Medical Journal [*Gastroenterology*](#) concludes:

"New research from China indicates that the novel coronavirus is also spread by fecal-oral transmission, not just by respiratory droplets or environmental contact".

"Hong Shan, MD, PhD, of Fifth Affiliated Hospital, Sun Yat-sen University, in Zhuhai, Guangdong Province, and colleagues noted that the gastrointestinal tract is a welcoming environment for the virus, also known as severe acute respiratory syndrome (SARS) CoV-2. "Our immunofluorescent data showed that the ACE2 protein, which has been proved to be a cell receptor for SARS-CoV-2, is abundantly expressed in the glandular cells of gastric, duodenal, and rectal epithelia, supporting the entry of SARS-CoV-2 into the host cell, the team wrote".

Source: COVID-19 Fecal Study (<https://www.medpagetoday.com/infectiousdisease/covid19/85315>)

Due to these conflicts, IRM is considering additional safety measures beyond typical PPE practices as discussed in the next sub-sections.

2.5 Safety Materials, Protection Clothing Cover, & Safety Materials:

These typically include, heavy duty rubber clothes, safety glasses, and day-to-day work clothing when working in situations with sewage. All maintenance vehicles of sub-contracting groups are provided with hand sanitizers and items trained to use by the State of Tennessee. This work is in compliance with current Operator's Certifications.

However, many forms of PPE such as gloves and sanitizer are in short supply. IRM keeps a good supply on hand so this is not of immediate concern but could cause issues in the future.

Additional PPE due to COVID-19 may prove necessary such as N-95 or greater mask as well as airtight eye and ear protection. We ask for guidance on this from TPUC, TDEC, and the Tennessee Department of Health.

IRM is not sure whether HAZEMAT precautions will be recommended for standard decentralized systems as simple as IRM Operates. No confined space entry is needed nor allowed by IRM.

Section 3

3.0 Proposed Management Changes - Request for Reduction of Exposure Due to Covid-19

3.1 Reduction of Routine Maintenance Tank Inspection Preventative Maintenance Schedule:

The Septic Tank Effluent Systems have been inspected and filters are cleaned regularly. This preventative action reduces alarms and prevents service calls. This preventative maintenance does require exposure to the sewage in the systems. The filters are designed to give IRM notice within 80% of failure. Therefore, IRM will step back the frequency of inspection. This will reduce the need for limited PPE supplies. Many of IRM's customers are rental units which have been reduced in activity, so this should not affect the overall performance of systems. Standard residential customers will be maintained as typical.

3.2 Temporary Suspension of Quarterly Monitoring:

IRM requests the temporary requirement or the Quarterly Monitoring of Decentralized Systems that have no sewer outcropping of effluents. This exposes to IRM's technicians, the public, and laboratory personnel to raw sewage who may not be equipped with the protective attire and procedures for the exposure which may be unnecessary at this time.

4.0 Summary

4.1 The Utilities' Need for Equipment and Materials:

The State of Tennessee receives approximately \$1.6 Billion U.S. Dollars for large utility services that supply wastewater treatment. Zero dollars are provided for on-site systems or decentralized system according to the National On-site Wastewater Recycling Association. Fifty percent of the State of Tennessee is serviced by on-site systems. IRM requests in this plan to receive an appropriation of materials and protective gear (PPE) to protect our Technicians, the public, and all, to fulfill The Honorable Governor Lee's Request. This request is for all on-site sewage disposal workers within TDEC, Privately Owned Public Utilities, and all that is required for the protection of possible exposure to COVID-19. Much of the PPE equipment is not available through standard channels. IRM did foresee upcoming issues and maintains a limited amount of inventory at the present time.

IRM requests assistance with securing proper PPE for our company and industry, as well as guidance to proper procedures in this evolving environment.